

ABSTRACT

A method is described of automatically locating and connecting a mobile wireless communications device to a packet-switched network such as the Internet. An Internet Protocol (IP) packet from a terminal on the network, destined for receipt by the mobile device, is received at a home agent acting as a gateway or router linking the packet switched network to a second network, such as LAN, coupled to a wireless communications network. The home agent transmits an access-request message to an authentication server. The access-request message includes a destination IP address associated with the mobile device found in the IP packet. The authentication server responsively issues an access-accept message to the home agent if the mobile device is authorized to receive the IP packet. The access-accept message comprises (a) information uniquely identifying said device, such as the IMSI/ESN number for the device, and (b) information identifying a network to use to locate said device. The home agent issues a message containing the information uniquely identifying the device to a mobile node location server. The mobile node location server maintains a table mapping IP addresses for a plurality of mobile communication devices to information uniquely identifying the devices. In the event that the mobile node location server does not find an IP address for the device in the table, the device is paged via the wireless communications network. In response to the page, the mobile device dials into the wireless communications network and second network and initiates a connection to the packet switched network whereby the IP packet is transmitted to the device.